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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,012	02/04/2004	Todd J. Lutz	7.166	5329

7590 04/28/2005

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EXAMINER	
ADDIE, RAYMOND W	

ART UNIT	PAPER NUMBER
3671	

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/773,012	LUTZ, TODD J.	
	Examiner	Art Unit	
	Raymond W. Addie	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 February 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-20, 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term " a reference structure that is at least indirectly supported" in claims 10, 28, lns. 11-12 is a relative term which renders the claim indefinite. The term "a reference structure" and "at least indirectly supported" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The scope of the term "a reference structure" is indefinite without an extensive knowledge Applicants' specification, in combination with an improper "reading of the spec" into the claimed limitation. Further, it is unclear as to whether "a reference structure" refers to a separate, or previously recited feature of the claimed invention. Hence, one of ordinary skill in the art, would not be able to make the claimed invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex*

parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 28 recites the broad recitation at least vertically extending drive shaft/engine mount, and the claim also recites generally vertically extending drive shaft/engine mount which is the narrower statement of the range/limitation.

Either --at least vertically-- or --generally vertically-- would be sufficient.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. # 6,089,787 in view of Owens # 5,984,571.

Allen et al. discloses a portable vibratory screed machine (20A), see Fig. 3; comprising:

A screed blade (24).

A machine frame (80/144/140/135) mounted on said screed blade.

At least one engine (82) including a rotational output and an engine housing.

A vibratory assembly (103/104) which is located remotely from said engine.

A drive shaft (102) extending from said rotational output, that transmits torque from said output to said vibratory assembly.

An engine mount (100/100a) that surrounds the drive shaft (102) and supports the engine in said remote location from said machine frame (144/140/135).

A reference structure (84) at least indirectly supported on the screed blade at (58), see Fig. 6.

What Allen et al. does not disclose is the use of a vibration restraint mounted to said engine. However, Owens teaches it is known to provide portable, vibratory screeds (10), having a cantilevered engine (12), remotely displaced from a machine frame (24) mounted to a screed blade (18), for transmitting torque to a vibration generator (16); with a vibration restraint (44), coupled to the engine (12/42) for support and stability, and further providing a handle (46) having a throttle control (48). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the portable screed machine (20A) of Allen et al., with a vibration restraint, as taught by Owens, in order to stabilize the device. See Col. 3, lns. 29-60.

In regards to claims 11, 12 Allen et al. discloses the reference structure further comprises at least one mount plate (84, 88) of the machine frame (80) on which the engine mount (100/100A) is supported. Further, Owens discloses the vibration restraint (44) is connected to the engine (12/42), adjacent a first end, and has a 2nd end configured to connect to a flange (unnumbered clip in fig. 1), see Fig. 7, forming a fastener, for connecting said restraint to a mount plate (30) of the frame (24). Such that the restraint is directly connected to said engine at said 1st end, and directly connected to said mount plate on said 2nd end. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the portable screed machine (20A) of Allen et al., with a vibration restraint, as taught by Owens, in order to stabilize the device. See Col. 3, Ins. 29-60.

In regards to claims 13, 14, 20 although Owens teaches the use of a restraint in the form of a tubular member (44), the restraint, being capable of restraining vibrations in a direction generally parallel to the central axis of the drive shaft, independent of the engine mount and further comprises an unnumbered plate, seen in Fig. 1, directly connecting the restraint to said engine housing (42), the plate being shaped to generally conform to the contour of a mating portion of the engine housing. The second end of the restraint being inclined relative to the engine connecting plate, cited above, and further teaches the 2nd end of the tubular member (44) having a flange in the form of

said unnumbered clip forming an opening to interconnect the tubular member (44) to a mount plate (30) forming a reference surface, at least indirectly supported by said screed plate (18). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the screeding machine of Allen et al. with a vibration restraint, as taught by Owens, in order to stabilize the device. See Col. 3, lns. 29-60.

In regards to claims 15-19 Allen et al. explicitly recites the use of internal combustion engines, in col. 3, ln. 4; but does not disclose the operating speeds nor the operational life span of the screeding device. However, Owens clearly teaches it is known to power portable screeding devices with either 2-cycle or mini 4 cycle engines. Further it is obvious to one of ordinary skill in the art, that 2-cycle, 2 horsepower gasoline engines of the type taught by Owens are operable in the range of 5,000-6,000 rpm. Still further, it is obvious that the use of a vibration restraint, as taught by Owens, would be "operable to quadruple the life span of said engine, to at least 200 operating hours compared to an unrestrained vibration. See Owens col. 1, lns. 31-47; col. 3, lns. 29-61.

In regards to claims 21, 23-27, Allen et al. discloses a method of operating a portable, vibratory screed machine (10), having the structural features disclosed above, with respect to claims 1-20 above; the method comprising the steps of:

Operating at least one engine (82) to drive at least one vibratory assembly (102/103) to generate vibratory forces imparted to the screed plate (24).

What Allen et al. does not disclose is the use of a vibration restraint, capable of restraining vibration forces directed generally parallel to a central axis of said drive shafts (102). However, Owens teaches a method of supporting and stabilizing a portable screeding device (10) by:

Restraining an engine (12/42) relative to a vibratory assembly (16) in a direction generally parallel to a drive shaft (12) by:

Providing a restraint (44) that couples the engine to a reference structure (30), in the form of a mount plate, that is at least indirectly on the screed plate an that is spaced form the engine mount (30) via unnumbered clip illustrated in Fig. 1.

Wherein said restraint further provides a handle (46) having throttle control (48).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the method of operating a vibratory screeding device of Allen et al., with the steps of restraining an engine relative to a vibratory generator, as taught by Owens, in order to support and stabilize said screeding device.

In regards to claim 22, although Owens does not explicitly teach to what extent the restraint is capable of reducing vibrational movement of the engine, relative to operating the same portable vibratory machine without performing the act of restraining; it is obvious from the structural relationships between the structural features of screeding

device (10), that the steps taught by Owens would result in at least a 40% reduction in the vibrational movement of said engine. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the method of operating a vibratory screeding device of Allen et al., with the steps of restraining an engine relative to a vibratory generator, as taught by Owens, in order to support and stabilize said screeding device.

Response to Arguments

3. Applicant's arguments with respect to claims 10-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Addie whose telephone number is (571) 272-6986. The examiner can normally be reached on Monday-Saturday from 7:00 am to 2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (571) 272-6998.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas Will
Supervisory Patent Examiner
Group 3600

RWA
4/23/2005